

We Claim:

1. A method for copy retouching digital image data that contains a periodic pattern, which comprises:

defining a starting position of a read mark that has a phase position in relation to a periodic pattern;

defining a starting position of a write mark;

calculating a distance vector D1 between the starting position of the read mark and the starting position of the write mark;

copying image data of image points located under the read mark into image points located under the write mark; and

calculating a corrected distance vector D2 such that a phase position of the write mark is equivalent to the phase position of the read mark in relation to the periodic pattern.

2. The method according to claim 1, wherein the image data is screened color separation data characterized by a screen width w and a screen angle α .

3. The method according to claim 2, which comprises:

expressing the distance vector D1 with rectangular components Dx1 and Dy1;

expressing the corrected distance vector D2 with rectangular components Dx2 and Dy2;

determining the rectangular components Dx2 and Dy2 with equations:

$Dx2 = (m) \times (w) \times (\cos\alpha) + (n) \times (w) \times (\sin\alpha)$, and

$Dy2 = (m) \times (w) \times (\sin\alpha) + (n) \times (w) \times (\cos\alpha)$, where m and n are integers; and

selecting the integers m and n to minimize equations:

$|Dx2 - Dx1|$ and $|Dy2 - Dy1|$.

4. The method according to claim 1, which comprises:

expressing the distance vector D1 with rectangular components Dx1 and Dy1;

expressing the corrected distance vector D2 with rectangular components Dx2 and Dy2;

determining the rectangular components Dx_2 and Dy_2 with equations:

$$Dx_2 = (m) \times (w) \times (\cos\alpha) + (n) \times (w) \times (\sin\alpha), \text{ and}$$

$$Dy_2 = (m) \times (w) \times (\sin\alpha) + (n) \times (w) \times (\cos\alpha), \text{ where } m \text{ and } n \text{ are integers; and}$$

selecting the integers m and n to minimize equations:

$$|Dx_2 - Dx_1| \text{ and } |Dy_2 - Dy_1|.$$

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